

Flightfax

ARMY AVIATION
RISK-MANAGEMENT
INFORMATION

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Flying habits and judgment are infectious.

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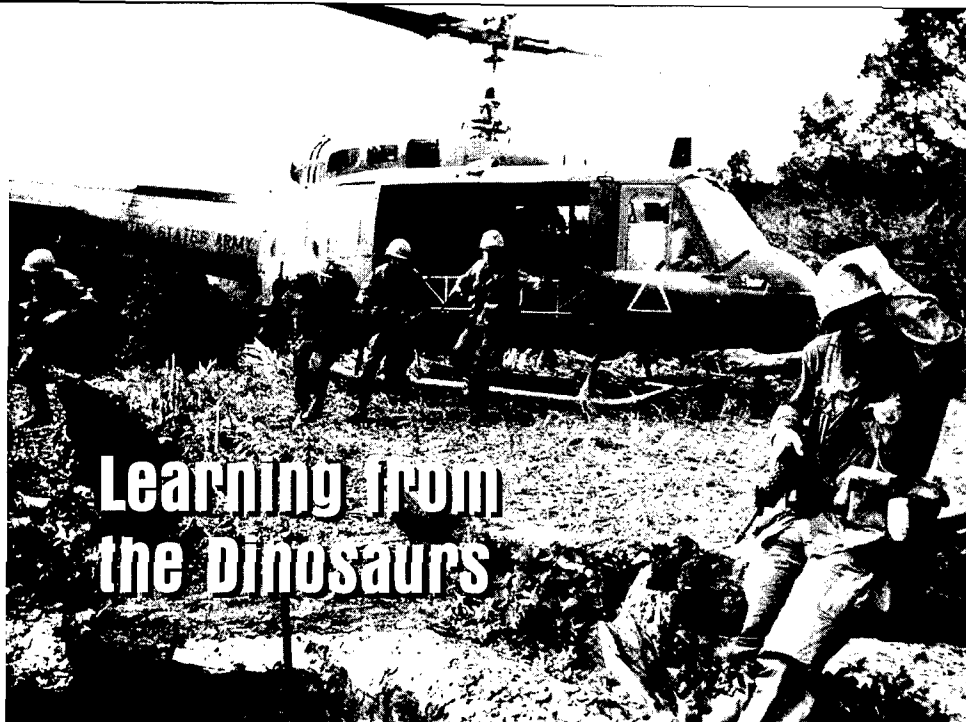
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Are yours worth catching?

In the fight against accidents, one thing rings true—it takes good habits and good judgment on the part of the individuals flying to ensure people's lives and expensive equipment are not squandered. In this issue, we take an interesting look at the liability of judgment.

In this issue

- Learn from the dinosaurs
- I've had an accident - What can they do to me?
- German hotdogs get a taste of Göring
- Does skill and knowledge equal judgment?
- Quitting nicotine? Read this!



Learning from the Dinosaurs

Have you ever run across one of those old dinosaur Cobra or Huey pilots from the Vietnam era? He could spin a yarn about the old days, when you never had enough power. He'll tell you about trading off ammunition or fuel just to get off the ground. He might even tell you about when he had to rock the pedals to get the aircraft moving, then gingerly apply forward cyclic to start sliding along the ground, the crew chief running along side. When he finally reached effective translational lift (ETL) the crew chief would jump on board and the helicopter would struggle into the air.

The old Cobra pilot will tell you of riding the limit of 50 pounds of torque, and having to reduce power prior to a left hand turn, just to prevent an over-torque due to the transient torque induced by the advancing blade. This all sounds ridiculous to the twin-engine modernized high-performance helicopter pilot. After all, there are no power issues in this day and age. The days are gone when you had to finesse the old Cobra around, keeping the nose into the wind and turning off your environmental control unit

(ECU) because your exhaust gas temperature (EGT) was in the yellow range. Or are they?

Helicopter pilots used to have trouble because the former families of aircraft only had minimal power. The old guys used to have to meticulously plan every aspect of the mission related to power available at each stage of the mission. And, they're glad to tell you that. But that doesn't happen any more. Right?

Typically, we fly around Fort Campbell, or Fort Hood, or Fort Bragg and never have a problem. Performance planning is almost a formality. The 5- or 10-foot hover power check is a glance at the torque just before takeoff. Recently, however, there have been a rash of accidents directly related to power management in the twin-engine modernized aircraft we presently fly around the world.

We deploy from home station to a totally different environment. Sometimes we get classes on PPC as it relates to the new conditions. Sometimes those conditions are extreme. For example, this year's deployments to Honduras, Guatemala, Albania, and Fort Bliss have each resulted in a power management-related major

accident. Even twin-engine super aircraft have power limits.

When we get to a 3000-, 4000-, or even 6000-foot density altitude, power from our engines reaches limits. With the GE 700 and GE 701 family of engines we reach a point where turbine gas temperature (TGT) is limited to prevent engine damage. The engine electronic control unit (ECU) begins to limit output to the hydro-mechanical unit (HMU), and we simply can get no more power from that engine. Although the -10 says TGT limiting happens at 867° C, we find this occurs around 860 +/- 9° C on the GE 701. A demand for more power results in rotor RPM bleed-off. A tail wind or turbulence can exacerbate this further.

The PPC calculated prior to the mission gives us a fair idea of what to expect during the mission at a predicted gross weight at a given altitude. We validate our gross weight through the 5- and 10-foot hover power check (200 lbs. = 1% roughly for GE 701 series aircraft). Then we compare our predicted value to our go/no-go values. If we cannot fly out-of-ground-effect (OGE), we should know it prior to getting into the cockpit. If there is a question of actual power or controllability, then we validate and should look to modify the mission. Let's take advantage of those conditions that are in our control, such as gross weight, or direction of flight, or abrupt control inputs. Learn to finesse the aircraft.

Maybe the old Cobra and Huey pilots knew something after all. Their old meticulous planning and flying habits are definitely worth catching!

—LTC Mark Robinson, (334) 255-1253/3943, DSN 558-1253, E-mail Robinsons@safety-ernh1.Army.mil

How to know when things "Don't look right"

The U.S. Army Safety Center (USASC) offers aggressive safety initiative programs that include on-site assistance visits and an NCO professional development mobile training team (MTT) to provide corps/division/brigade-sized units and installations with safety assistance. The Safety Center provides the programs at no monetary cost to the unit, providing risk management training and assistance at all command levels.

ASSISTANCE VISIT PROGRAM

You get a week-long assistance visit, tailored to unit requirements, to provide training in hazards identification, POV toolbox application, driver's training program applications, ground and aviation systems safety, and risk management at leader and senior NCO levels.

You may select activities from a menu which USASC subject matter experts tailor to meet unit needs. Some visits target large air and ground audiences, providing an overview of the latest Army accidents as well as the hazards

associated with them. Other events take a "train the trainer" approach, leaving the organization with a core of trained personnel more fully able to effectively apply risk management to all operations.

The assistance team can also provide an individual unit (battalion) assessment on maintenance, training, operations, and safety, to give non-attribution feedback to the commander. The assessment can also identify good ideas to share Army-wide. We learn from the units what works and then provide other Army organizations proven methods to eliminate potential accidents.

NCO PROFESSIONAL DEVELOPMENT MOBILE TRAINING TEAM (MTT).

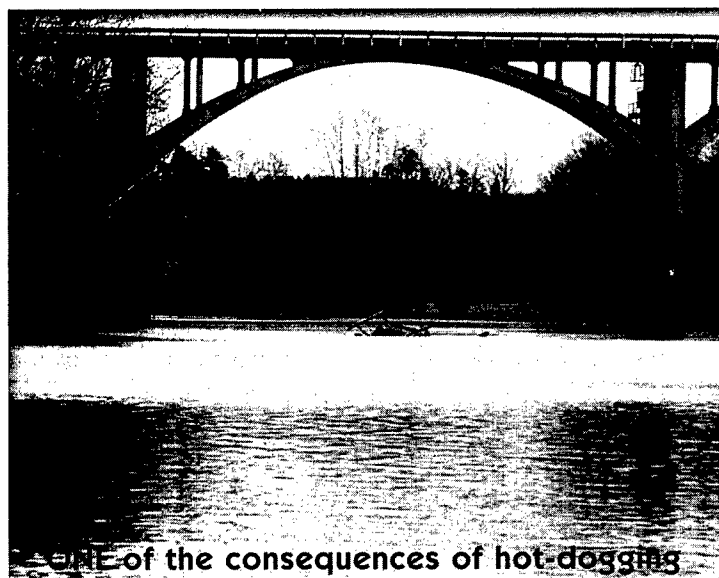
The MTT teaches risk management to NCOs—we don't produce a Safety NCO. NCOs are the leaders on the ground "where the rubber meets the road" and are most likely to have a direct impact on accident prevention. So, we have designed a 45-hour course focused on hazard identification and risk management. The target

audience is sergeants and staff sergeants who can apply risk management in all phases of training and operations. Their direct leadership translates into speaking up when something just does not "look right". This training provides positive habit transfer where risk management skills learned on-duty will help soldiers become better risk managers off-duty as well.

Give us 30-50 NCOs for a week. The USASC will help train leaders who are better prepared to identify and control hazards on ranges, in motor pools, or wherever high-risk operations occur. This program rewards your outstanding NCOs with three hours of college credit.

The cost to the unit is only a commitment of time and selected personnel for a single week. We will do everything possible to accommodate your training schedule. Tell us when you need us, and we'll make every effort to be there.

—LTC Mark Robinson, (334) 255-1253/3943, DSN 558-1253, E-mail Robinsom@safety-emh1.Army.mil



ONE of the consequences of hot-dogging

Am I Liable?... Should I Be Liable?

Accountability Should Be Part Of Every Commander's Safety Program

The US Army Safety Center and the policies it promulgates are focused on accident prevention. Part of the prevention process is accident investigation and reporting. Through investigations, we strive to identify causes of accidents and recommend changes to preclude the same mistakes from occurring again.

Under AR 385-40 (the regulation governing investigations), no one in the Army may use the

information gathered during a safety investigation to take any adverse action against the person or persons whose actions (or inaction) caused the accident. Often though, the errors of the individuals involved in an accident arise to such a high level of negligence or willful disregard for safety that administrative or punitive measures should be taken. Although these measures cannot be based on information obtained through the safety investigation, commanders can rely on collateral reports, reports of surveys, line of duty determinations and other criminal or administrative reports to provide the factual basis for action against a soldier or civilian employee.

The purpose of this article is to inform commanders of their options under the Uniformed Code of Military Justice (UCMJ).¹ The UCMJ has several provisions that can be used to charge leaders and operators for their inappropriate actions or inaction regarding the performance of their duties and the impact on the safety of their soldiers. These articles include:

**ARTICLE 93 -
CRUELTY AND MALTREATMENT:**

"Any person subject to this chapter who is guilty of cruelty toward, or oppression or maltreatment of, any person subject to his orders shall be punished as a court-martial may direct." A Blackhawk pilot who chooses to take an infantry squad on the "ride of their life" and intentionally sets out to "make them puke" could be guilty of this article.

**ARTICLE 119 -
INVOLUNTARY MANSLAUGHTER:**

"Any person subject to this chapter who, without an intent to kill or inflict great bodily harm,



unlawfully kills a human being by culpable negligence." A similar offense is...

**ARTICLE 134 -
NEGLIGENT HOMICIDE.**

If on the same "ride of their life", the Blackhawk pilot exceeded the aircraft's capabilities and crashed the aircraft, killing those same infantry squad members, the pilot could be prosecuted for these offenses which carry a potential sentence of a dishonorable discharge, forfeiture of all pay and allowances, and confinement for 10 years for involuntary manslaughter or 3 years for negligent homicide.

**ARTICLE 92 - FAILURE TO OBEY
ORDERS OR REGULATIONS.**

This is by far, the article most commonly available to commanders for safety violations.

Many provisions of regulations are included for the safety of our service members, their family members and the general public. Failure to adhere to these regulations can lead to an Article 15 or prosecution under Article

92. Violations of this article include disobeying an order, disregarding regulations or being derelict in the performance of your duties. The maximum punishments for these offenses vary with the degree of culpability of the defendant.

Violating an order or regulation is fairly clear cut and is an easy concept for each of us to understand. If the army has published an order or regulation and it is lawful, you must follow it. To be guilty of dereliction of duty, you need only be found to have acted with simple negligence or with culpable inefficiency in the face of a duty to act otherwise. 'Negligence' is any act or failure to act when you have a duty to use care. Aviation is an inherently dangerous business and you always have a duty to use care in the operation of an aircraft. 'Culpable inefficiency' means a reckless, gross or deliberate disregard for the foreseeable results of an act or a failure to act without a reasonable or just excuse. Operating an aircraft on

the edge of its performance limits ('hot-dogging', 'crankin' and bankin' ", etc.) would be acting with culpable inefficiency.

EXAMPLES

Several high-visibility courts-martial illustrate the application of these articles. The trials of Navy and Army aviators in the spring and summer of 1999 made headlines around the world.

■ **Aviano.** In February, 1998, an Navy EA-6B Prowler on a training mission near Aviano Air Base, Italy, killed 20 people when it severed the cables supporting a gondola. In July of that year, general courts-martial were ordered for Capt. Richard Ashby, the aircraft pilot, and Capt. Joe Schweitzer, the navigator. Capt. Ashby was charged with 20 counts of involuntary manslaughter, one count of destroying government property, destroying private property, and two charges of dereliction of duty. Capt. Ashby was acquitted of all charges. Capt. Schweitzer, originally charged with many of the same charges, was ultimately tried on one count of impeding an administrative proceeding related to his removal of and hiding/or destroying a videotape of the accident flight. He admitted his guilt and was sentenced to dismissal from the military. Other members of the EA-6B crew were originally charged with UCMJ violations but were given immunity for their

testimony against Ashby and Schweitzer.

■ **Bahamas.** Closer to home are the trials of Chief Warrant Officers Guido and Riddell for the deaths of their wives while aboard a Blackhawk for an unauthorized familiarization flight in the Bahamas. Together, these aviators were originally charged with over 25 counts of UCMJ violations. Only four charges went forward to court-martial. The most serious charges, involuntary manslaughter and wrongful destruction of military property, were dropped after the Article 32 hearing. At trial, Riddell was found guilty of wrongful appropriation of a military aircraft and violation of a lawful regulation. He was sentenced to forfeiture of \$500 pay for five months and a \$2,000 fine.

This accident was a tragedy for the entire aviation community. One news account claimed that Riddell, at the controls at the time of the accident, had earned the nickname "Air Show Dan".² Other reports claim that the aviators assigned to the Bahamas mission had "started performing flight maneuvers in a 'competition' to outdo each other weeks before [the] accident." One aviator in the unit testified that pilots would do a low fly-by over the housing area and abrupt turns. Complaints to the chain of command about the lack of safety in the operational environment went unanswered.

The extreme danger of allowing these actions is the cumulative effect. This aviator testified that "When someone performs a maneuver and others see it, they think it's OK. The next person performs it with a little more flair and pretty soon, it becomes a competition."³

Commanders should learn from this tragedy. Accepting your unit's own "Air Show Dan" can lead to another death or loss of another aircraft. Don't tolerate such behavior. Don't ignore complaints made about safety. And, don't be afraid to take action. An Article 15 or courts-martial is a very serious thing...but so is aviation safety. Use all the tools you have to ensure the safety of your units and the soldiers you carry.

If you have any questions about this article or your obligations as a leader to maintain the health and welfare of your soldiers, please contact the USASC Command Judge Advocate or your local Judge Advocate's office.

—LTC Gleisberg, Command Judge Advocate,
United States Army Safety Center,
(334) 255-2924, DSN 558-2924,
E-mail: gleisberc@safety-emh1.army.mil

¹ The Army regulatory structure offers numerous administrative actions to be taken against officers, enlisted soldiers and civilians who fail to perform their duties. These measures will be discussed in a future issue of *Flightfax*.

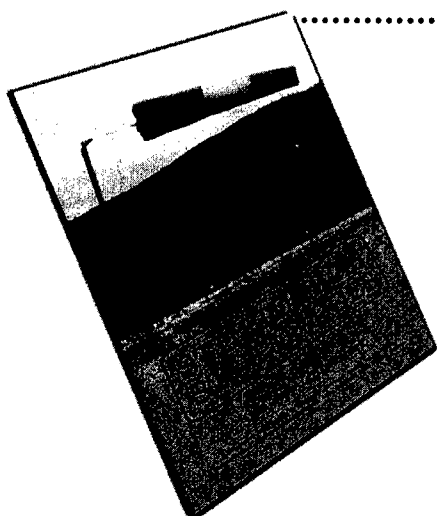
² The *Savannah Morning News Electronic Edition*, "Who's to Blame? Attorneys debate cause of Black Hawk crash that killed the wives of two Hunter pilots," by Noelle Phillips.

³ The *Savannah Morning News Electronic Edition*, "Pilot tells of unsafe flying in the Bahamas," by Noelle Phillips.

An Early Holiday Gift

The latest aviation safety poster should be arriving at your unit soon. Check with your battalion or brigade ASO. If it hasn't arrived by 30 November, email your request for "Windsock poster" to forehans@safety-emh1.army.mil.

You can also download posters from our website and print your own. Go to <http://safety.army.mil>, click on MEDIA, then POSTERS. Select the one you want, click download, pour a cup of coffee and...



Achtung! You Never Had It So Good!

(Management of Flying Safety in the Luftwaffe during WWII)

There has been much focus in recent years on the responsibility of management in flying regulations, the prevention of aircraft accidents, and the promotion of flying safety generally. Accident investigators tend to look a lot closer at flying accidents that [appear to be "pilot error."]

Observing the passage of time that has elapsed we can, perhaps, look back with tongue in cheek a little at how flying safety was managed (and the processes employed) in one air force during WWII. The incidents cited in this article were extracted from captured German Air Force flying safety records.

At the beginning of WWII, Reich Marshal Herman Göring gave each *flieger* the one-time word on the subject of violating flying regulations while in the employ of the Luftwaffe. The German Air Force accident or violation report was officially known as a Disturbance Report. When a pilot got his name on one of these reports, it was usually SOP to give him a large boulder, a hammer, and a five-year plan to convert the boulder to sand.

The Reich Marshal took a dim view of anybody in his Air Force who violated regulations. And, in a letter to his commanders in the field Göring said, "I order, that in cases against flying order and discipline, the disciplinary superiors will take merciless action with the utmost strictness

against the guilty ones and advance their education as fliers with all means at their disposal. They will be responsible to me to see to it that the efficiency of the troops will not be weakened due to careless accidents."

His order of 'merciless action' worked two ways. If a superior failed to take action in cases of infractions, or if he did and the action was not severe enough, then Herman had two candidates for the rock farm. To cite examples of how flying safety was prompted in the Third Reich, the following should suffice.

IRRESPONSIBLE AIRCREW

Lieutenant Engler, a pilot attached to one flying school, received five years in prison and a reduction in rank. On a navigational flight, he temporarily permitted the flight engineer to take over the controls and then made turns below the prescribed minimum safe altitude over a town. Following this, Engler flew up a valley where, due to downdrafts, the aircraft crashed after clipping a tree, and was destroyed. Four occupants were killed and two seriously injured.

Then there was the case of Lieutenant Schmidt of the Blind Flying School. He got one year in prison and a reduction [in rank]. On 12 June, 1941 he was ordered to fly a JU52 from Gardemoen to Neuruppin. During the first intermediate landing in Copenhagen, he neglected to refuel. He pulled the same trick

CANDIDATES FOR



"YANK AND BANK"



"CAV TAKEOFF"

after landing at Prenzlau. Some 15 minutes after taking off from Prenzlau, his aircraft's engines failed due to fuel exhaustion. An attempted forced-landing was unsuccessful and the aircraft crashed in a forest, injuring three of his crew.

Not to be outdone by his Luftwaffe cronies, Lieutenant

Kornblum of the 10th Squadron Bomb Wing, during a cross-country flight from Lille to Brussels, flew low-level without authority. While flying over a bridge at an extremely low altitude, the aircraft struck a telegraph wire where, due to the damage suffered by the aircraft, it necessitated an emergency

landing. Still not be outdone, his superiors gave him months at a lower altitude yet.

MISGUIDED STUDENT

Student pilots too had their "15 minutes of fame" in the GAF.

Lieutenant Schaefer, a student at a training establishment at Pardubitz, was "awarded" eight months in prison and a reduction in rank for his misdemeanor.

Apparently, after failing to "gas up" at his home base, he took off and promptly deviated from his flight plan, without authorization, [and landed] at another base to refuel. Coincidentally, relatives were residing nearby.

After carrying out a good number of steep turns at low level over their property, he landed back at the refuelling base, returning by road

to visit his relatives.

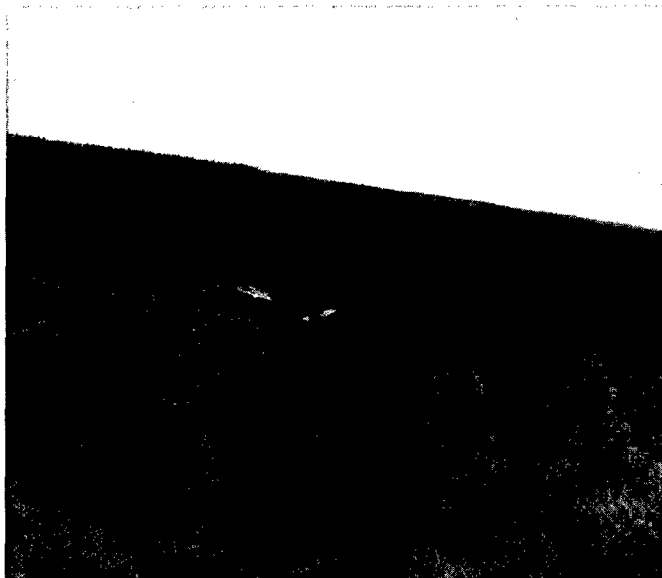
In another "relative" incident, Lieutenant Klein and S/SGT Satow of Special Purpose Bomb Wing No. 1, got four months and two months in the pokey [jail], respectively. Lieutenant Klein, as commander, and S/SGT Satow, as pilot, were on a delivery flight and made an intermediate landing in Prague-Rusin. While there, they had the opportunity to visit a relative who expressed a burning desire to go for a flight. Following an initial refusal, a flight was made under the pretext of a communications or a local weather flight, and three cousins were taken along who were not members of the Wehrmacht. During this flight, the passengers were treated to a no-doubt enjoyable, but nevertheless unauthorized, low-level trip.

The fact that even threats of incarceration failed to impress irresponsible GAF pilots suggests that there are many ways of moving men, but only one way may be depended upon to bring about the use of sound judgment and dependability. You can push people around with a strong arm. You can overwhelm them with authority. You can stampede them with fear. You can confuse them with falsehood. You can wear them down with endless argument. But the only way of making men obey regulations willingly and effectively, and of keeping them moving in the right direction, is to impress them with the responsibilities and liability entrusted to them, so that they will stay on the straight and narrow of their own free will.

Isn't that the way it ought to be?

—Reprinted with permission. Article originally appeared in *Supervision and Risk Management*, First Edition, 1998, published by the Director of Flying Safety, Australian Defense Force.

THE ROCK FARM



"SKIMMING TREES"



"TAIL SURFING"

This speech was given by Gerald M. Bruggink during the July 1, 1999 graduation ceremonies for Dutch pilots at the U.S. Army Aviation Center, Fort Rucker, Alabama. Mr. Bruggink, born and raised in the Netherlands, first began his military flight training in 1939. He fought in World War II as a combat fighter pilot and became a POW of the Japanese in 1942. After the war, he returned to flying units on Java, but in 1950 he returned to the Netherlands to begin instructing. He emigrated to the U.S. in 1955, where, soon after, he became an instructor pilot in Air Force and Army schools. In the early 1960's, Mr. Bruggink started his career in safety—a career that took him through the U.S. Army Safety Center and National Transportation Safety Board (NTSB). He retired as the Deputy director of the Bureau of Accident Investigation in the NTSB.

You Should Have Heard What the Dutch Were Told...

Reflections on the role of judgment

"Being asked to address a group of graduating Dutch pilots here at Fort Rucker is a distinct honor for an old-timer, who would like to use this opportunity to offer you more than congratulations and good wishes. However, all the smart things that can be said on such a momentous occasion have already been beaten to death many times in the past. Nevertheless, I am going to dig up an ancient piece of wisdom as it appeared in a prepared text presented by Charles Lindbergh at a safety conference in New York in 1928: "A pilot's real training begins in flying, as in other professions, after he has left school."

That was 71 years ago, and you have no reason to question the validity of that statement. As a graduate with brand-new wings, you don't expect to get orders tomorrow assigning you as pilot-in-command of Queen Beatrix's helicopter. What makes the difference in selecting a pilot to a particular task? The standard answer is your experience level. But, is that the complete answer? Did Lindbergh have something

else in mind when he used the term "real training"?

As one of this country's most gifted pilots, he was well aware that the most critical part of a pilot's "real training" is the development of his judgment as he gathers experience. While there is a limit to the skills you can learn in handling your aircraft, the development of your judgment in using these skills is a never-ending process. Thus we should never look at a pilot's total flying experience in isolation. The most telling, as well as the most elusive part of a pilot's make-up, is the maturity level of his judgment. Where does that leave you now that you are stepping out of the protective school environment with limited experience and judgment? This ceremony today provides the answer. You got your wings because you have sufficient maturity of judgment to safely gain the experience that turns you into a mission-ready pilot.

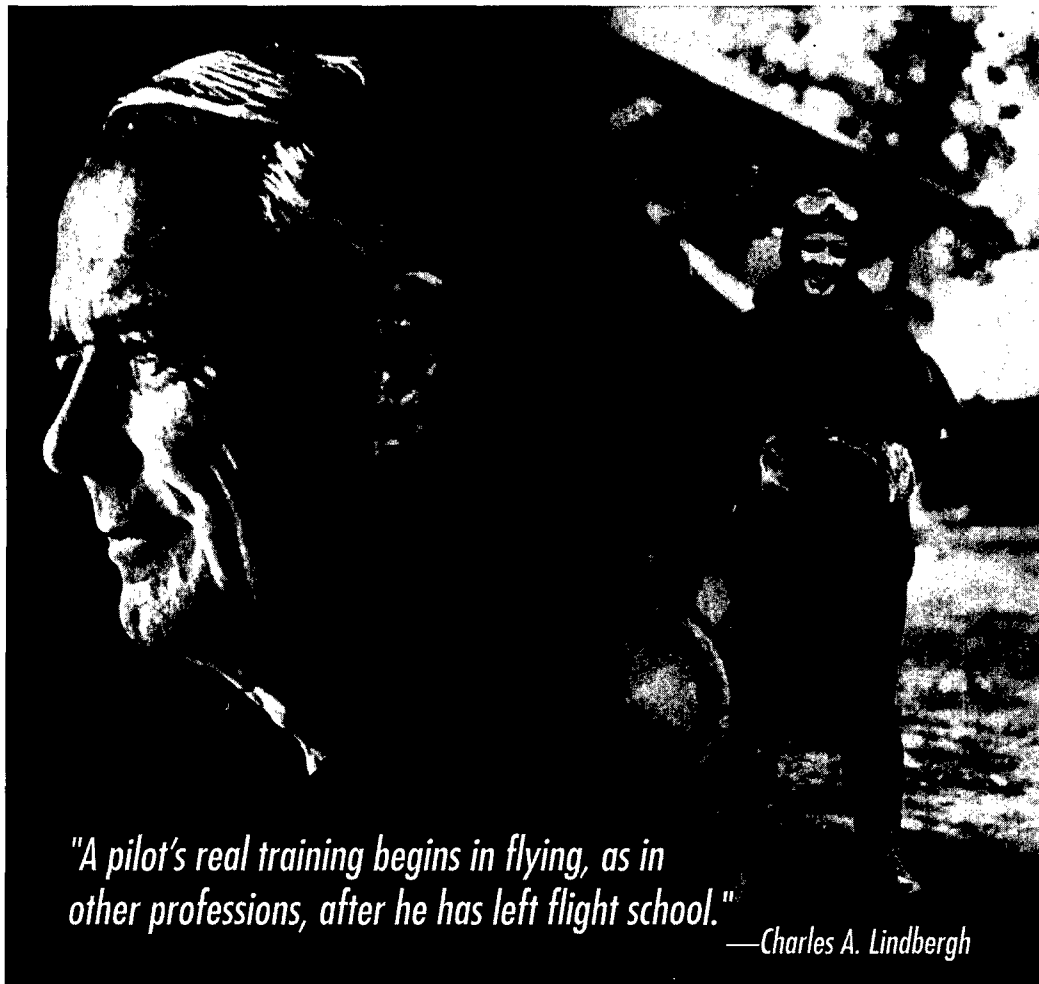
As I have no business venturing onto terrain covered by the land mines of behavioral science, I won't mess with the intricacies of pilot judgment. Instead, I will remind you of your familiarity with the development of judgment and its effects on risk management in a more mundane form of transportation: driving a car. The value of this comparison is not reduced by the rumor I heard that it is easier to get a private pilot's license in this country, than a driver's license in Holland!

When you passed your driver's test, you convinced the examiner

that you had adequate skills, knowledge and judgment to gain practical experience on your own without endangering yourself and others. As your experience grew, you found out that risk management on crowded highways requires more than driving skills and obeying traffic rules. You learned to make allowances for the unpredictable behavior of other road users without using foul language or insulting gestures. You discovered that your judgment of traffic situations and your subsequent decisions were affected by your mood, the influence of distractions, time pressures, fatigue and a host of other factors. You were also confronted with the hazards of road conditions, inclement weather, and design shortcomings in your car. Finally, you probably learned the hard way that constant vigilance sets the stage for the exercise of sound judgment.

You will go through a similar but more complex and unforgiving maturing process in aviation. As a pilot who began his military flight training 60 years ago in what now seems the Stone Age of Aviation, I could entertain you for hours with the things I got away with and those that got me into trouble. But this is not the time or the place. Instead, I have capsulized what I learned and observed over the years in a number of thoughts that may benefit the development of your aviation judgment:

1. An unpredictable factor in any person's life is the blind role of chance, be it hostile or



"A pilot's real training begins in flying, as in other professions, after he has left flight school."
—Charles A. Lindbergh

benevolent. Don't look at this as a form of fatalism, but as an incentive to give fate a helping hand in your favor.

2. For many years, I have tried to spread the word that one of the greatest hazards in aviation is uncritical acceptance of easily verifiable assumptions. The collision in Tenerife between two B-747's that killed 583 persons proves the point. This was the mother of all human factor accidents.

3. The development of your judgment is not only governed by your own experience, but also by the experience of others, negative as well as positive. Those who learn the most at Happy Hour are the ones who keep their mouth shut and their ears wide open. In addition, read every mishap report you can lay your hands on with this question in mind: At which point would I have done things differently?

4. Many accident investigating authorities fail to strengthen the protective role of the human element by not answering this question: What might have reduced the likelihood of the accident or the severity of its consequences?

5. Persons who survive adolescence and ownership of their first car have been exposed to the basic human factor aspects and the elements of chance in accident avoidance and causation. What they actually learned in this process is largely a matter of their perceptiveness, innate intelligence and sense of care.

6. [What is] the most simple and practical interpretation of human factors in our daily activities? Make it easier for yourself and others to stay out of harm's way.

7. Every form of flying has an ultimate objective, which is not safety per se. Commercial aviation

has to keep its stockholders happy; military aviation is perfecting its capabilities in pursuit of the nation's objectives; and the general aviation pilot who flies just for the fun of it may have safety on his mind but not as his ultimate objective.

8. Even the crew of Air Force One cannot assure the President that they will complete their next trip without a mishap. They can only bend the odds in their own favor and hope that everyone involved in the condition of their aircraft and the progress of their flight does the same thing.

9. Whether you realize it or not, having confidence in your aircraft implies that you have confidence in its maintenance personnel.

You promote the "Right Stuff" in those personnel by taking an active interest in what it takes to keep your aircraft serviceable.

10. Considering the uncertainties of the future, you may want to keep this thought in the back of your mind: Contrary to conventional wisdom, the principal driving force for an individual in a combat situation is not so much flag and country and similar lofty notions but the trust and the expectations of his teammates and leader.

These are some of the thoughts that may be helpful as your aviation career develops and your judgment matures. In the meantime, I have been hovering out of ground effect too long and I come back to earth with this wish: May sound judgment always remain your trustworthy companion in the air, on the road, and at home."

—Gerald Bruggink

"I want to quit smoking. Can I fly?"

The bottom line up front is that nicotine patches, even though they are now an "over the counter" (OTC) medication, are still a medication; the use of which must be monitored by a flight surgeon or Aeromedical Physician Assistant.

Nicotine from any source, including patches, can have systemic effects. Although generally safe when properly used and monitored, some of the most frequently reported adverse effects from using patches include, diarrhea, heart burn, insomnia, nervousness, excess sweating, joint and muscle pain, nausea and vomiting, headaches, and rashes. Any of these will be made worse if, as some people have done, they use nicotine gum or continue to smoke while using patches.

The good news is that no waiver is required for using nicotine patches. Nevertheless, the guidance of the Aeromedical Policy Letter (APL) concerning smoking cessation is quite clear, "...No waiver is required. Nicotine gum may not be used while flying. Nicotine patches may be worn while flying; however, it is advisable to fly with another fully qualified, rated aviator. Local flight surgeons are responsible for prescribing and managing the nicotine weaning program for all aviation personnel. When initially prescribed a nicotine patch or gum, the aviator will be restricted from flying for 72 hours. Once 72 hours has passed with no

evidence of significant side effects and the patient has successfully abstained from smoking, the aviator may return to full aviation duties. Smoking is absolutely forbidden at all times. One episode of smoking voids the contract made with the flight surgeon, and the aviator must be considered to be medically restricted until cleared by the flight surgeon (FS). Temporary clearance should be granted for the duration of treatment while under the direct guidance of the FS..."

The guidance of the APL is consistent with AR 40-8, Temporary Flying Restrictions Due to Exogenous Factors:

"4. Exogenous factors. Aircrew members receiving any substance or procedure likely to provoke an adverse systemic reaction shall be restricted from flying duties until declared fit by a flight surgeon. Factors to consider and appropriate medical restrictions to flying activities are:

a. Administration of drugs. Aircrew members taking drugs which have a systemic effect will be restricted from flying duties until convalescence and/or rehabilitation is completed. This will not, however, be construed as prohibiting aircrew members use of chemoprophylactic agents



recommended after aeromedical evaluation by the appropriate medical authority. All drugs and medications will be dispensed by or with the knowledge of a flight surgeon."

Remember, what is safe for a guy who works behind a desk, may not always be safe for flying NOE with NVGs.

If you are interested in quitting smoking through the use of patches, your local flight surgeon or Aeromedical Physician Assistant is there to help you; it is what they get paid for. Experimenting on your own is not the right answer.

—LTC Noback, Flight Surgeon, US Army Safety Center, DSN 558-2763, Comm (334) 255-2763, E-mail: nobackr@safety-emh1.army.mil

AVA Y2K OK?

Aviation Vibration Analyzer Update

Your unit's aviation vibration analyzer (AVA) is infected with the Year 2000 bug—meaning the AVA will shut down on 01 January 2000 unless you take action to prevent it. Change 4 to TM 1-6625-724-13&P (Aug 94) tells you how to keep it working.

You need to change the current year (99) to the conversion year (91) before 01 January 2000. Here's what you do:

- Turn on the AVA Control and Display Unit (CADU).
- Select MANAGER by pressing the F4 function key.
- Using the directional arrow buttons, highlight SETUP on the next screen and press the DO button.
- Highlight SET TIME & DATE and press the DO button.
- Enter the conversion year (91) in place of the current year (99) and press the DO button to save and exit.

If you don't change the current year to the conversion year before 01 January 2000, you will need to reformat your CADU. Assistance is available by contacting Robert Branhof at (256) 313-4948 or DSN 897-4948 or by e-mail at: robert.branhof@redstone.army.mil

This work-around holds the Y2K bug at bay until a permanent fix can be fielded. Change 4 also changes the AVA calibration requirement from once every 360 days to once every three years.

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Accident briefs

Information based on preliminary reports of aircraft accidents

AH64



Class B D series

■ Aircraft hovered to the left for parking. While over the cement parking pad, both pilots agreed that a pole, located 75 feet to the 11 o'clock position, might be too close. The PC hovered to the rear and contacted a parked AH-64D 40 feet behind them. The AH-64D lost tail rotor thrust and crashed. Both aircraft sustained extensive damage, yet the pilots were uninjured. The PC had been in the cockpit for approx. 10 hours, flying for approximately seven hours, and awake for approximately 20 hours.

Class C A series

■ While in cruise flight, the TADS night site shroud fell off the aircraft. The missing shroud wasn't detected until the post flight inspection. There was no further damage to the aircraft, and maintenance replaced the night site shroud assembly.

■ IP initiated a simulated, OGE single engine failure from a 400-foot hover. He retarded the No. 1 engine to idle, but during the PI's application of collective to arrest the aircraft's descent, the No. 2 engine torque peaked at 134%. The IP reduced collective to normal operating range, and the aircraft was landed without further incident. Requires replacement of transmission and drive shaft.

Class E A Series

■ During an approach to a parade field for a static display, downwash from the aircraft blew two folding card tables into the air. One of the card tables hit a woman in the back of the head. She was taken to a medical facility and diagnosed with a mild concussion. The other table hit a man on the leg causing some abrasions.

D Series

■ During troubleshooting of the 30mm gun, the ground crew failed to close the left, forward avionics door. During a test of the gun, it impacted the door while being slewed. Only the

door was damaged.

■ During armament troubleshooting procedures, the right EFAB door was opened to checkout circuit breakers. The back seat pilot announced he was going to shut down the APU, but the front seat pilot announced he wanted to check the gun one more time. Before the ground crew could close the door, the gun was slewed and impacted the right EFAB door. Only the door was damaged.

CH47



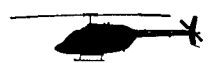
Class C D Series

■ During SVFR departure for hurricane evacuation, Chalk 2 in a flight of two executed a decelerating turn for spacing due to heavy rain and low visibility. The No. 2 engine failed, and the aircraft descended to momentary contact with the water below. The right gear contacted the water with sufficient force to knock the FE to the floor and bend the hydraulic test panel door back 90 degrees. Cause of engine failure under investigation.

Class E D series

■ During hot refueling, crewmember noticed an empty trash bag fly into the aft rotor system. Crew shutdown aircraft and inspected the blades after removing the trash bag. No damage was found.

OH58



Class B D(R) Series

■ During a training flight, crew experienced engine overspeed, followed by a loss of tail rotor control. Crew attempted a run-on landing, but the aircraft landed hard, sustaining major structural damage. No injuries reported.

Class D D Series

■ After the RADS equipment was removed from aircraft, the MP completed a through-flight inspection before the final run-up. As the blades

began to turn, the CE noticed an object fly away from the aircraft. Upon shutdown, the MP found two M/R blades and one pitch change tube damaged.

UH1



Class B V Series

■ Aircraft was in a deceleration during a practice autorotation. The tail stinger and tail rotor contacted ground, causing the aircraft to pitch forward and land hard. When the aircraft came to rest, the skids were spread and the 90-degree T/R gearbox had separated. The IP received minor injuries.

UH60



Class A MH-60K

■ During the deceleration for a Fastrope maneuver, the power available was exceeded, and the aircraft descended into the trees with violent force. Although the pilots had correctly computed their performance numbers, the engine torque factor for both engines was logged incorrectly. This caused the power available to be lower than the pilots computed. One passenger, a soldier, received fatal injuries.

Class B L Series

■ Auxiliary Power Unit compartment door separated during flight and struck two main rotor blades. Crew noted a disturbance in the controls during the flight and executed a precautionary landing. Post flight inspection revealed damage to two main rotor blades, No. 1 engine HIRSS, the tail rotor drive shaft, APU compartment, and the VHF-FM No. 2 antenna.

Class C L series

■ While taxiing to parking, the crew heard a strange noise. During the post flight inspection, the crew found that a main rotor blade abrasion strip had come off and struck tail rotor gearbox and blades.

Class D A series

■ While conducting an external load operation, the aircraft contacted the top of load. This caused three puncture holes in bottom of aircraft, resulting in minor airframe structural damage and damage to marker beacon antenna.

L series

On post flight inspection, the crew discovered that the APU access cover had been ripped from aircraft while in flight. No other damage was reported.

Class E A Series

Crew experienced an in-flight engine shutdown, resulting from a worn power available spindle barrel that failed.

L Series

During the extraction phase of a multi-ship artillery raid, the left chain leg detached from the M119 howitzer load, causing the gun to flip over as the aircraft tried to pick it up.

■ During an NVG brigade air assault, flight lead encountered brownout conditions while landing. There was zero illumination, and the ground was sloped. The crew executed a hard landing, right wheel first. Upon completion of the mission, the crew noticed that the left wheel was flat and that the wheel fairing was cracked.

C12



Class D J series

■ During a VFR, night landing in heavy rains, the pilot at the controls touched down left of centerline. The aircraft hydroplaned and struck two runway edge lights before the pilot could correct. The wheel and tire had to be replaced due the damage. Contributing factors were glare from bright edge lighting on runway, heavy rain on windscreen, ending on a 13-hr duty day (9hrs of flying), and a lack of center line lighting.

Class E H Series

■ RC-12H - During cruise flight in IMC, the pilot's flight instruments failed, followed shortly by the failure of the co-pilot's instruments. The crew declared an emergency and continued the flight to the airfield under a partial panel. The aircraft descended into VFR conditions under radar control. After breaking out into VFR conditions, the crew completed a visual approach, and the aircraft was landed without further incident. The emergency was caused by the failure of a 26 VAC fuse in the primary electrical BUS.

For more information on selected accident briefs, call DSN 558-9855 (334-255-9855). Note: Information published in this section is based on preliminary mishap reports submitted by units and is subject to change.



POV Fatalities through 30 Sep

FY99	FY98	3-yr Avg
124	116	113

HIGH-RISK PROFILE

Age & Rank:

19-23, E1-E4, O1, O2

Place:

Two-lane rural roads

Time:

Off-duty, 1100-0300

Friday & Saturday nights

TRENDS

1. No seatbelt or helmet
2. Too fast for conditions
3. Fatigue
4. Motorcycle accidents up

"... leaders must be willing to underwrite their subordinates' honest errors and coach them on to excellence, without tolerating incompetence or laxity. We must recognize that Army leaders are not perfect, and that activity at the ragged edge of audacity sometimes leaves debris in it's wake."

—GEN William W. Hartzog

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FY99 Aviation Accidents through 30 September

		Class A	Class B	Class C	Total
ACCIDENTS	Total Avn Accts	18	13	90	121
	Flight Acct Rate	1.97	1.31	7.67	10.95
RATE COMPARISON	FY99 vs. FY98	46 %	191 %	0.3 %	16 %
	FY99 vs. 3-yr avg	81 %	42 %	14 %	26 %
Aviation Military Fatalities					20

Note: FY99 Flight Accident Rate is based on estimated year-end flying hours



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